I claim:

1. A process for preparing fibrinogen adhesive from whole blood which process comprises:

directly contacting plasma which has been removed from said whole blood with an amount of polyethylene glycol (MW 200-8000) effective to precipitate said fibrinogen;

recovering the precipitated fibrinogen; and

suspending said precipitate in aqueous medium.

2. The process of claim 1 wherein the plasma is prepared by centrifugation of whole blood treated with anticoagulant.

3. The method of claim 2 wherein the anticoagulant is citrate buffer.

4. The method of claim 1 wherein the PEG has a molecular weight of 1,000-1,500.

5. The method of claim 4 wherein said effective amount is 8-15% w/v.

6. The method of claim 1 wherein the fibrinogen precipitate is recovered by centrifugation.

7. A fibrinogen adhesive composition prepared by the method of claim 1.

8. A pharmaceutical composition effective for cementing tissues which comprises the fibrinogen adhesive composition of claim 7 in admixture with thrombin and calcium ion.

9. A method to cement tissues which method comprises applying to said tissues an effective amount of the fibrinogen adhesive composition of claim 7 and an effective amount of thrombin and calcium ion.

10. An apparatus for preparing a fibrinogen adhesive composition from human blood, which apparatus comprises:

a first chamber in fluid communication with a second chamber,

means for effecting said fluid communication, and means for interrupting said fluid communication;

means for withdrawing a sample of human blood into said first chamber in the presence of anticoagulant;

said first chamber being configured so as to permit separation of plasma and red blood cells in said blood sample;

a means to dispense said separated plasma from said first chamber to said second chamber free of said red blood cells wherein said second chamber contains an amount of polyethylene glycol effective to precipitate fibrinogen from said plasma, said second chamber being configured so as to permit separation of the precipitated fibrinogen from the remaining plasma;

means to dispose of said remaining plasma.

11. The apparatus of claim 10 wherein said each of first and second chambers is a body of a syringe.

12. The apparatus of claims 11 wherein said means for dispensing plasma comprises a plunger fitted to the syringe body.

13. The apparatus of claim 12 wherein said means for interrupting fluid communication includes a valve between said first and second chambers.

14 The apparatus of claim 12 wherein said means for interrupting fluid communication includes a means for detaching said means for effecting fluid communication.

15. An applicator device for injecting a two-component system into an animal subject, which applicator comprises a first and second dispensing means each having an inlet end and an outlet end disposed in parallel so as to permit the two components to be mixed when dispensing pressure is applied to the first and second dispensing means;

a means for applying dispensing pressure to said first and second dispensing means; and

disposed adjacent to said first and second outlet ends, a means to apply suction adjacent to and at said outlet ends.

16. A method to apply sealant to a tissue to be sealed which sealant comprises a fibrinogen adhesive component and a Ca^{+2}/thrombin component,

which method comprises dispensing said components into a premixing space adjacent to the tissue to be sealed to form the sealant, and

applying suction to the tissue to be sealed to remove debris and excess sealant.

17. A method to apply sealant to a tissue to be sealed with sealant comprises a fibrinogen adhesive component and a Ca^{+2}/thrombin component,

which method comprises dispensing said components from the apparatus of claim 15.